

**Flood Control Project Maintenance
Levee Inspections**

Fall 2019 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

ST0012	Overall LMA Rating	Total LMA Miles						
Sacramento Maintenance Yard Willow Slough Bypass	A	12.51						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments	0.01		0.01	0.08%	1.32			
Slope Stability	0.04		0.04	0.32%				
Erosion / Bank Caving	0.09		0.09	0.72%				
<i>Supplemental</i>								
DRAFT DWR UCIP Field Study					0.07			
DRAFT DWR UCIP LMA Responsibility								
<i>LMA Totals:</i>	0.14	0.00	0.14	1.12%	1.39	0.00	0.00	0.00
Unit No. 01 Willow Slough Bypass or North Levee LB	Overall Unit Rating	Total Unit Miles						
ST0012	A	5.05						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments	0.01		0.01	0.20%	1.21			
Slope Stability	0.04		0.04	0.79%				
Erosion / Bank Caving	0.08		0.08	1.58%				
<i>Supplemental</i>								
DRAFT DWR UCIP Field Study					0.03			
DRAFT DWR UCIP LMA Responsibility								
<i>Unit Totals:</i>	0.13	0.00	0.13	2.57%	1.24	0.00	0.00	0.00
Unit No. 02 Willow Slough Bypass or South Levee RB	Overall Unit Rating	Total Unit Miles						
ST0012	A	7.46						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments					0.11			
Erosion / Bank Caving	0.01		0.01	0.13%				
<i>Supplemental</i>								
DRAFT DWR UCIP Field Study					0.04			
DRAFT DWR UCIP LMA Responsibility								
<i>Unit Totals:</i>	0.01	0.00	0.01	0.13%	0.15	0.00	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Fall 2019 Levee Inspection Results****Sacramento Maintenance Yard Willow Slough Bypass**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			A	

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† **SPRING INSPECTIONS:** Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2019 Levee Inspection Results

Sacramento Maintenance Yard Willow Slough Bypass

Waterway			Bank	Unit Miles
Unit No. 01 Willow Slough Bypass or North Levee			Left	5.05
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	4/30/2019 - 4/30/2019		10/16/2019 - 10/16/2019	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By				

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start		Rating **	A	Issue No.	6
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_ST0012_01_s _ 2013_6				
Comment Code					
Inspector Comment					
Sacramento Maintenance Yard has copies of their O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_ST0012_01_s _ 2013_7				
Comment Code					
Inspector Comment					
Sacramento Maintenance Yard has a stockpile of flood response material.					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_ST0012_01_s _ 2013_8				
Comment Code					
Inspector Comment					
Sacramento Maintenance Yard has a written flood response plan and flood fight training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.00	Rating **	M	Issue No.	17
LM End	0.06	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.590772°	38.590758°
				-121.665343°	-121.666370°
DWR ID	DWR_ST0012_01_s_2017_17				
Comment Code					
FE : Fence					
Inspector Comment					
There is a chain link fence.					

Photo 1 of 1 : FA_2019_ST0012_295_17_20190829_00006.jpg



View of fence on the landside shoulder. Spring 2018.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.02	Rating **	A/W	Issue No.	24	
LM End	0.02	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590766 °	38.590766 °	
				-121.665560 °	-121.665560 °	
DWR ID	17834					
Comment Code						
Inspector Comment						
DS_ID:17834 FS_ID:44903 EP_NO: 10130 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 01/08/2019 Received updated permit information for this crossing from D. Biswas with the CVFPB. The structure description has been updated with the correct abandonment permit information. (O. Magana - DWR UCIP) 05/02/2017 CVFPB Letter sent April 12, 2012 regarding Permit #10130 - Internal Inspections of Pipes Crossing State Plan of Flood Control Levee. Permit No. 10130 previously referenced in UCIP record was removed--permit does not reference 36-inch pipe. (O. Magana - DWR UCIP) 04/12/2017 Mud/debris on WS removed by JK, RF. (C. Lund - DWR Sacramento Yard) 05/05/2015 Removed debris from the outlet. (C. Lund - DWR Sacramento Yard) 09/19/2012 Minor debris blocking flap gate. Debris/log needs to be removed from the outlet. (P. Amatya - DWR UCIP) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 18 feet below the crown. Flap gate is located on the waterside (WS) end. (no permit was found authorizing 36-inch pipe [pipe is referenced in O&M Manual, Station 271+54]; 36-inch was authorized for abandonment under Permit No. 12789-1, 2018 - City of Davis) [Additional Reference(s): USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 271+54)] FS Date: 5/5/2015 8:02:11 AM						

Photo 1 of 3 : UCIP_FA_2019_44903_22882.jpg



Landside view- beyond grass area see drainage inlet

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.02	Rating **	A/W	Issue No.	24 (cont)
LM End	0.02	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.590766 °	38.590766 °
				-121.665560 °	-121.665560 °
DWR ID	17834				
Comment Code					
Inspector Comment					
DS_ID:17834 FS_ID:44903 EP_NO: 10130 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 01/08/2019 Received updated permit information for this crossing from D. Biswas with the CVFPB. The structure description has been updated with the correct abandonment permit information. (O. Magana - DWR UCIP) 05/02/2017 CVFPB Letter sent April 12, 2012 regarding Permit #10130 - Internal Inspections of Pipes Crossing State Plan of Flood Control Levee. Permit No. 10130 previously referenced in UCIP record was removed--permit does not reference 36-inch pipe. (O. Magana - DWR UCIP) 04/12/2017 Mud/debris on WS removed by JK, RF. (C. Lund - DWR Sacramento Yard) 05/05/2015 Removed debris from the outlet. (C. Lund - DWR Sacramento Yard) 09/19/2012 Minor debris blocking flap gate. Debris/log needs to be removed from the outlet. (P. Amatya - DWR UCIP) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 18 feet below the crown. Flap gate is located on the waterside (WS) end. (no permit was found authorizing 36-inch pipe [pipe is referenced in O&M Manual, Station 271+54]; 36-inch was authorized for abandonment under Permit No. 12789-1, 2018 - City of Davis) [Additional Reference(s): USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 271+54)] FS Date: 5/5/2015 8:02:11 AM					

Photo 2 of 3 : UCIP_FA_2019_44903_22881.jpg



Waterside view- general view

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.02	Rating **	A/W	Issue No.	24 (cont)	
LM End	0.02	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590766 °	38.590766 °	
				-121.665560 °	-121.665560 °	
DWR ID	17834					
Comment Code						
Inspector Comment						
DS_ID:17834 FS_ID:44903 EP_NO: 10130 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 01/08/2019 Received updated permit information for this crossing from D. Biswas with the CVFPB. The structure description has been updated with the correct abandonment permit information. (O. Magana - DWR UCIP) 05/02/2017 CVFPB Letter sent April 12, 2012 regarding Permit #10130 - Internal Inspections of Pipes Crossing State Plan of Flood Control Levee. Permit No. 10130 previously referenced in UCIP record was removed--permit does not reference 36-inch pipe. (O. Magana - DWR UCIP) 04/12/2017 Mud/debris on WS removed by JK, RF. (C. Lund - DWR Sacramento Yard) 05/05/2015 Removed debris from the outlet. (C. Lund - DWR Sacramento Yard) 09/19/2012 Minor debris blocking flap gate. Debris/log needs to be removed from the outlet. (P. Amatya - DWR UCIP) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 18 feet below the crown. Flap gate is located on the waterside (WS) end. (no permit was found authorizing 36-inch pipe [pipe is referenced in O&M Manual, Station 271+54]; 36-inch was authorized for abandonment under Permit No. 12789-1, 2018 - City of Davis) [Additional Reference(s): USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 271+54)] FS Date: 5/5/2015 8:02:11 AM						

Photo 3 of 3 : UCIP_FA_2019_44903_22880.jpg



Waterside overview. Notice waterway.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.03	Rating **	A/W	Issue No.	25	
LM End	0.03	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590771 °	38.590771 °	
				-121.665860 °	-121.665860 °	
DWR ID	17613					
Comment Code						
Inspector Comment						
DS_ID:17613						
FS_ID:44904						
EP_NO: 10309						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: 09/19/2012 Abandoned in place. CMP filled with concrete. (DWR UCIP - P. Amatya)						
FIELD_STRUCT_DESC: 30-inch steel drainage pipe through the levee, 16.5 feet below the crown. Flap gate is located on the waterside (WS) end. Manhole and grate are located on the landside (LS) toe. (30-inch pipe [HLM 0.01] authorized under Automatic Board Order (ABO) issued as Permit No. 10309, 1974 - City of Davis). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 270+70)]						
FS Date: 5/5/2015 8:02:49 AM						

LM Start	0.03	Rating **	A/W	Issue No.	25 (cont)
LM End	0.03	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_44904_22885.jpg



Waterside view- CMP grouted with concrete.

Photo 2 of 3 : UCIP_FA_2019_44904_22884.jpg



Waterside view- CMP grouted with concrete (closer view)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.03	Rating **	A/W	Issue No.	25 (cont)	
LM End	0.03	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590771 °	38.590771 °	
				-121.665860 °	-121.665860 °	
DWR ID	17613					
Comment Code						
Inspector Comment						
DS_ID:17613 FS_ID:44904 EP_NO: 10309 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 09/19/2012 Abandoned in place. CMP filled with concrete. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 30-inch steel drainage pipe through the levee, 16.5 feet below the crown. Flap gate is located on the waterside (WS) end. Manhole and grate are located on the landside (LS) toe. (30-inch pipe [HLM 0.01] authorized under Automatic Board Order (ABO) issued as Permit No. 10309, 1974 - City of Davis). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 270+70)] FS Date: 5/5/2015 8:02:49 AM						

Photo 3 of 3 : UCIP_FA_2019_44904_22886.jpg



Landside overview- pumping plant not related with this crossing.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.79	Rating **	A/W	Issue No.	26	
LM End	0.79	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DRAFT DWR UCIP LMA Responsibility			38.590480 °		38.590480 °
				-121.679790 °		-121.679790 °
DWR ID	17608					
Comment Code						
Inspector Comment						
DS_ID:17608						
FS_ID:44907						
EP_NO: 10313						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: 04/12/2017 LS - dump has it plugged, WS - ditch need to be established debris higher than water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund)						
09/19/2012 Pipe sits on concrete saddle on WS. (DWR UCIP - P. Amatya)						
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 0.79] authorized under Automatic Board Order (ABO) issued as Permit No. 10313, 1974 - Lear). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2, 4 (Station 232+43)]						
FS Date: 5/5/2015 8:06:14 AM						

Photo 1 of 3 : UCIP_FA_2019_44907_22894.jpg



Landside view- pipe and headwall

LM Start	0.79	Rating **	A/W	Issue No.	26 (cont)
LM End	0.79	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2019_44907_22893.jpg



Landside view- pipe and headwall closer view

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.79	Rating **	A/W	Issue No.	26 (cont)	
LM End	0.79	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590480 °	38.590480 °	
				-121.679790 °	-121.679790 °	
DWR ID	17608					
Comment Code						
Inspector Comment						
DS_ID:17608 FS_ID:44907 EP_NO: 10313 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 LS - dump has it plugged, WS - ditch need to be established debris higher than water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/19/2012 Pipe sits on concrete saddle on WS. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 0.79] authorized under Automatic Board Order (ABO) issued as Permit No. 10313, 1974 - Lear). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2, 4 (Station 232+43)] FS Date: 5/5/2015 8:06:14 AM						

Photo 3 of 3 : UCIP_FA_2019_44907_22892.jpg



Waterside view

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	1.50	Rating **	M	Issue No.	27	
LM End	1.50	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.590330 °	38.590330 °	
				-121.693030 °	-121.693030 °	
DWR ID	17612					
Comment Code						
Inspector Comment						
DS_ID:17612 FS_ID:54247 EP_NO: 10315 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments07/01/2019 Crossing has been modified from irrigation siphon to storm drainage prior to 2012. No permit has been found authorizing the modifications to this pipe. Pipe inlet on LS is buried in soil. Sinkhole approximately 2-foot in diameter and 2-foot deep located at LS toe along pipe alignment. This crossing was internally inspected as part of the DWR's Deferred Maintenance Project in 2017. Unable to determine what happened to the pipe section through the channel and opposite levee. Coordinating with LMA and Yolo County to determine owner of crossing. (O.Yakimov - DWR UCIP) 09/19/2012 Looks 24-inch HDPE pipe sleeved through 42-inch pipe. A 30-inch flap gate on WS looks recently replaced. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch drainage pipe sleeved through an existing 42-inch siphon steel irrigation pipe through the levee, 13.5 feet below the crown. 42-inch pipe cut off and steel plate welded at WS toe, annular space seems to be filled with cement slurry. Pipe inlet enclosed into concrete casing on the landside (LS) end. (42-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 10315, 1974 - Reclamation District No. 2035) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 193+70)] FS Date: 7/1/2019 3:27:02 PM						

Photo 1 of 3 : UCIP_FA_2019_54247_80003.jpg



Landside view

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	1.50	Rating **	M	Issue No.	27 (cont)	
LM End	1.50	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.590330 °	38.590330 °	
				-121.693030 °	-121.693030 °	
DWR ID	17612					
Comment Code						
Inspector Comment						
DS_ID:17612 FS_ID:54247 EP_NO: 10315 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments07/01/2019 Crossing has been modified from irrigation siphon to storm drainage prior to 2012. No permit has been found authorizing the modifications to this pipe. Pipe inlet on LS is buried in soil. Sinkhole approximately 2-foot in diameter and 2-foot deep located at LS toe along pipe alignment. This crossing was internally inspected as part of the DWR's Deferred Maintenance Project in 2017. Unable to determine what happened to the pipe section through the channel and opposite levee. Coordinating with LMA and Yolo County to determine owner of crossing. (O.Yakimov - DWR UCIP) 09/19/2012 Looks 24-inch HDPE pipe sleeved through 42-inch pipe. A 30-inch flap gate on WS looks recently replaced. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch drainage pipe sleeved through an existing 42-inch siphon steel irrigation pipe through the levee, 13.5 feet below the crown. 42-inch pipe cut off and steel plate welded at WS toe, annular space seems to be filled with cement slurry. Pipe inlet enclosed into concrete casing on the landside (LS) end. (42-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 10315, 1974 - Reclamation District No. 2035) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 193+70)] FS Date: 7/1/2019 3:27:02 PM						

Photo 2 of 3 : UCIP_FA_2019_54247_80001.jpg



Closeup view of sinkhole

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	1.50	Rating **	M	Issue No.	27 (cont)
LM End	1.50	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.590330 °	38.590330 °
				-121.693030 °	-121.693030 °
DWR ID	17612				

Comment Code

Inspector Comment

DS_ID:17612
FS_ID:54247
EP_NO: 10315
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 07/01/2019 Crossing has been modified from irrigation siphon to storm drainage prior to 2012. No permit has been found authorizing the modifications to this pipe. Pipe inlet on LS is buried in soil. Sinkhole approximately 2-foot in diameter and 2-foot deep located at LS toe along pipe alignment. This crossing was internally inspected as part of the DWR's Deferred Maintenance Project in 2017. Unable to determine what happened to the pipe section through the channel and opposite levee. Coordinating with LMA and Yolo County to determine owner of crossing. (O.Yakimov - DWR UCIP)
09/19/2012 Looks 24-inch HDPE pipe sleeved through 42-inch pipe. A 30-inch flap gate on WS looks recently replaced. (DWR UCIP - P. Amatya)
FIELD_STRUCT_DESC: 24-inch drainage pipe sleeved through an existing 42-inch siphon steel irrigation pipe through the levee, 13.5 feet below the crown. 42-inch pipe cut off and steel plate welded at WS toe, annular space seems to be filled with cement slurry. Pipe inlet enclosed into concrete casing on the landside (LS) end. (42-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 10315, 1974 - Reclamation District No. 2035) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 193+70)]
FS Date: 7/1/2019 3:27:02 PM

Photo 3 of 3 : UCIP_FA_2019_54247_80002.jpg



Sinkhole at LS toe at pipe alignment

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	1.52	Rating **	A/W	Issue No.	28	
LM End	1.52	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590340 °	38.590340 °	
				-121.693360 °	-121.693360 °	
DWR ID	17623					
Comment Code						
Inspector Comment						
DS_ID:17623						
FS_ID:44929						
EP_NO: 10310						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments:						
FIELD_STRUCT_DESC: 20-inch steel drainage pipe sleeved though 30-inch corrugated metal pipe through the levee, 12.5 feet below the crown. 24-inch flap gate is located on the waterside (WS) end. (30-inch pipe [HLM 1.53] authorized under Automatic Board Order (ABO) issued as Permit No. 10310, 1974 - Hunt-Wesson Foods, Inc.) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 192+88)]						
FS Date: 5/5/2015 8:20:02 AM						

LM Start	1.52	Rating **	A/W	Issue No.	28 (cont)
LM End	1.52	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_44929_22929.jpg



Waterside view- pipe and flap gate

Photo 2 of 3 : UCIP_FA_2019_44929_22928.jpg



Waterside view- 20-inch pipe sleeved into 30-inch pipe

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	1.52	Rating **	A/W	Issue No.	28 (cont)	
LM End	1.52	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590340 °	38.590340 °	
				-121.693360 °	-121.693360 °	
DWR ID	17623					
Comment Code						
Inspector Comment						
DS_ID:17623 FS_ID:44929 EP_NO: 10310 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 20-inch steel drainage pipe sleeved though 30-inch corrugated metal pipe through the levee, 12.5 feet below the crown. 24-inch flap gate is located on the waterside (WS) end. (30-inch pipe [HLM 1.53] authorized under Automatic Board Order (ABO) issued as Permit No. 10310, 1974 - Hunt-Wesson Foods, Inc.) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 192+88)] FS Date: 5/5/2015 8:20:02 AM						

Photo 3 of 3 : UCIP_FA_2019_44929_22931.jpg



Waterside overview

LM Start	1.53	Rating **	M	Issue No.	14
LM End	2.20	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.590334 °	38.590466 °
				-121.693618 °	-121.705849 °
DWR ID	DWR_ST0012_01_f_2016_14				
Comment Code					
FE : Fence					
Inspector Comment					
There is a barbed wire fence along this section of levee.					

Photo 1 of 1 : FA_2019_ST0012_295_14_20190829_00005.jpg



View of fence encroaching 10-foot easement on landward side of the levee. Fall 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	2.01	Rating **	A/W	Issue No.	29	
LM End	2.01	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590390 °	38.590390 °	
				-121.702470 °	-121.702470 °	
DWR ID	17619					
Comment Code						
Inspector Comment						
DS_ID:17619 FS_ID:44937 EP_NO: 10307 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/26/2017 LS - removed debris and needs to be sprayed, work completed by JK, MH. (DWR Sacramento Yard - C. Lund) 04/12/2017 LS - good/clear, WS - little debris (handwork-cleared) , inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/28/2013 flap gate cleaned and standpipe repaired. (DWR Sacramento Yard - C. Lund) 09/19/2012 The 48-inch concrete manhole damaged - top ring knocked off in waterside. Debris found in waterside pipe. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch drainage pipe of unknown material through the levee, 10 feet below the crown. Flap gate is located on the waterside (WS) end. Concrete headwall is located on the WS and landside (LS) ends. Slide gate is located inside a 48-inch manhole located on the WS slope. (24-inch pipe [HLM 2.04] authorized under Automatic Board Order (ABO) issued as Permit No. 10307, 1974 - Beckman). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 165+69)] FS Date: 5/5/2015 8:25:25 AM						

LM Start	2.01	Rating **	A/W	Issue No.	29 (cont)
LM End	2.01	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_44937_22951.jpg



Landside view- concrete pipe and headwall.

Photo 2 of 3 : UCIP_FA_2019_44937_22949.jpg



Landside view- debris

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	2.01	Rating **	A/W	Issue No.	29 (cont)							
LM End	2.01	Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	DRAFT DWR UCIP LMA Responsibility		38.590390°	38.590390°								
			-121.702470°	-121.702470°								
DWR ID	17619											
Comment Code												
Inspector Comment												
DS_ID:17619 FS_ID:44937 EP_NO: 10307 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/26/2017 LS - removed debris and needs to be sprayed, work completed by JK, MH. (DWR Sacramento Yard - C. Lund) 04/12/2017 LS - good/clear, WS - little debris (handwork-cleared) , inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/28/2013 flap gate cleaned and standpipe repaired. (DWR Sacramento Yard - C. Lund) 09/19/2012 The 48-inch concrete manhole damaged - top ring knocked off in waterside. Debris found in waterside pipe. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch drainage pipe of unknown material through the levee, 10 feet below the crown. Flap gate is located on the waterside (WS) end. Concrete headwall is located on the WS and landside (LS) ends. Slide gate is located inside a 48-inch manhole located on the WS slope. (24-inch pipe [HLM 2.04] authorized under Automatic Board Order (ABO) issued as Permit No. 10307, 1974 - Beckman). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 165+69)] FS Date: 5/5/2015 8:25:25 AM												

Photo 3 of 3 : UCIP_FA_2019_44937_22948.jpg



Waterside view- concrete manhole.

LM Start	2.36	Rating **	M	Issue No.	18							
LM End	2.36	Issue Type +	Ma	Location *	WS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Encroachments		38.590434°	38.590434°								
			-121.708937°	-121.708937°								
DWR ID	DWR_ST0012_01_s_2019_18											
Comment Code												
DE : Debris												
Inspector Comment												
A mattress on the waterside slope needs removal.												

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2019

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	2.92	Rating **	M	Issue No.	30 (cont)
LM End	2.92	Issue Type +	Ma	Location *	

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	2.92	Rating **	M	Issue No.	30 (cont)	
LM End	2.92	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DRAFT DWR UCIP LMA Responsibility			38.590580 °		38.590580 °
				-121.719220 °		-121.719220 °
DWR ID	17620					
Comment Code						
Inspector Comment						
DS_ID:17620 FS_ID:55422 EP_NO: 10311 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/01/2019 Received information from Vincent Rodriguez - FMO that this pipe was lined using the CIPP method on April 18, 2019. Removed Urgent status and will follow up with inspection photo. (O.Yakimov - DWR UCIP)04/09/2019 Grouted 10-foot into the pipe on the WS. Internal inspection has been completed and it shows major erosion of pipe. Recommend complete removal and replacement. Pipe is in a section of major county road (Road 29). (J. McCabe - DWR Sacramento Yard)04/12/2017 good/clear on LS & WS, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/28/2013 Some small vegetation removal is needed on landside of the levee. (DWR Sacramento - C. Lund) 09/19/2012 Vegetation removal on landside of the levee. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 2.95] authorized under Automatic Board Order (ABO) issued as Permit No. 10311 - Ittner and Harlan). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 118+00)] FS Date: 11/1/2019 8:16:07 AM						

Photo 3 of 3 : UCIP_FA_2019_55422_22960.jpg



Landside view- vegetation around inlet.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	2.93	Rating **	M	Issue No.	10
LM End	3.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.590572 °	38.590653 °
				-121.719349 °	-121.720714 °
DWR ID	DWR_ST0012_01_s_2015_10				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
There appears to be runoff on the landside slope. It possibly could be from an abandoned pipeline that is caving in.					

LM Start	2.93	Rating **	M	Issue No.	10 (cont)
LM End	3.00	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : FA_2019_ST0012_295_10_20190829_00002.jpg



View of the erosion on the landside slope. Fall 2018.

Photo 2 of 3 : FA_2019_ST0012_295_10_20190829_00003.jpg



Additional view of the erosion on the landside slope. Fall 2018.

LM Start	2.93	Rating **	M	Issue No.	10 (cont)
LM End	3.00	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2019_ST0012_295_10_20190829_00004.jpg

View of the erosion on the landward side of the levee looking upstream.
Fall 2015.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.05	Rating **	M	Issue No.	31
LM End	3.05	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.590612 °	38.590612 °
				-121.721689 °	-121.721689 °
DWR ID	17621				

Comment Code

Inspector Comment

DS_ID:17621
FS_ID:55421
EP_NO: 10312
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 11/01/2019 Received information from Vincent Rodriguez - FMO that this pipe was removed and replaced. Removed Urgent status and will follow up with inspection photo. (O.Yakimov - DWR UCIP)04/09/2019 Internal inspection has been completed and inspection shows major erosion on the WS outlet. Recommend complete removal and replacement. Pipe is in a section of major county road (Road 29). (J. McCabe - DWR Sacramento Yard) 04/12/2017 good/clear on LS & WS, inspected by JK, RF. (DWR Sacramento Yard - C. Lund)
09/19/2012 Depressions on waterside slope of the levee. (DWR UCIP - P. Amatya)
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 3.08] authorized under Automatic Board Order (ABO) issued as Permit No. 10312, 1974 - Kelly). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 110+97)]
FS Date: 11/1/2019 8:12:10 AM

LM Start	3.05	Rating **	M	Issue No.	31 (cont)
LM End	3.05	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_55421_22967.jpg



Waterside view- pipe and flap gate.

Photo 2 of 3 : UCIP_FA_2019_55421_22970.jpg



Waterside view- pipe and flap gate (close view).

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.05	Rating **	M	Issue No.	31 (cont)
LM End	3.05	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.590612° -121.721689°	38.590612° -121.721689°
DWR ID	17621				
Comment Code					
Inspector Comment					
DS_ID:17621 FS_ID:55421 EP_NO: 10312 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/01/2019 Received information from Vincent Rodriguez - FMO that this pipe was removed and replaced. Removed Urgent status and will follow up with inspection photo. (O.Yakimov - DWR UCIP)04/09/2019 Internal inspection has been completed and inspection shows major erosion on the WS outlet. Recommend complete removal and replacement. Pipe is in a section of major county road (Road 29). (J. McCabe - DWR Sacramento Yard) 04/12/2017 good/clear on LS & WS, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/19/2012 Depressions on waterside slope of the levee. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 3.08] authorized under Automatic Board Order (ABO) issued as Permit No. 10312, 1974 - Kelly). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 110+97)] FS Date: 11/1/2019 8:12:10 AM					

Photo 3 of 3 : UCIP_FA_2019_55421_22969.jpg



Landside view- pipe and concrete headwall.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.55	Rating **	A/W	Issue No.	32	
LM End	3.55	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590680 °	38.590680 °	
				-121.730720 °	-121.730720 °	
DWR ID	17622					
Comment Code						
Inspector Comment						
DS_ID:17622						
FS_ID:44947						
EP_NO: 10316						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: 04/12/2017 good/clear on LS & WS, inspected by JK, RF. (DWR Sacramento Yard - C. Lund)						
05/28/2013 Debris on waterside flap gate has been removed. (DWR Sacramento Yard - C. Lund)						
09/19/2012 Debris on waterside flap gate. Needs debris removal from the pipe. (DWR UCIP - P. Amatya)						
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Flap gate is located on the waterside (WS) end. Concrete pad is located on the WS. (24-inch pipe [HLM 3.57] authorized under Automatic Board Order (ABO) issued as Permit No. 10316, 1974 - Stafford). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 85+00)]						
FS Date: 5/5/2015 8:38:32 AM						

LM Start	3.55	Rating **	A/W	Issue No.	32 (cont)
LM End	3.55	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_44947_22984.jpg



Waterside view- overview

Photo 2 of 3 : UCIP_FA_2019_44947_22983.jpg



Waterside view- pipe, flap gate and debris.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.55	Rating **	A/W	Issue No.	32 (cont)	
LM End	3.55	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.590680 °	38.590680 °	
				-121.730720 °	-121.730720 °	
DWR ID	17622					
Comment Code						
Inspector Comment						
DS_ID:17622						
FS_ID:44947						
EP_NO: 10316						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: 04/12/2017 good/clear on LS & WS, inspected by JK, RF. (DWR Sacramento Yard - C. Lund)						
05/28/2013 Debris on waterside flap gate has been removed. (DWR Sacramento Yard - C. Lund)						
09/19/2012 Debris on waterside flap gate. Needs debris removal from the pipe. (DWR UCIP - P. Amatya)						
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Flap gate is located on the waterside (WS) end. Concrete pad is located on the WS. (24-inch pipe [HLM 3.57] authorized under Automatic Board Order (ABO) issued as Permit No. 10316, 1974 - Stafford). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 85+00)]						
FS Date: 5/5/2015 8:38:32 AM						

Photo 3 of 3 : UCIP_FA_2019_44947_22986.jpg



Waterside view- pipe, flap gate and debris. The pipe sits on concrete saddle.

LM Start	3.69	Rating **	M	Issue No.	23
LM End	3.69	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.591699 °	38.591699 °
				-121.733066 °	-121.733066 °
DWR ID	DWR_ST0012_01_s_2019_23				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Appears to be runoff erosion on the waterside slope and toe road.					

Photo 1 of 1 : FA_2019_ST0012_295_23_20190829_00007.jpg



View of hole on the toe road. Spring 2019.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.88	Rating **	M	Issue No.	20
LM End	3.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.593886 °	38.594355 °
				-121.734986 °	-121.735409 °
DWR ID	DWR_ST0012_01_f_2019_20				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Appears to be many sinkholes on the landside slope.					

Photo 1 of 1 : FA_2019_ST0012_295_20_20191108_00035.jpg



View of sinkholes on the landside slope. Fall 2019.

LM Start	4.12	Rating **	M	Issue No.	4
LM End	4.60	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.596784 °	38.599845 °
				-121.737662 °	-121.744830 °
DWR ID	DWR_ST0012_01_s_2012_4				
Comment Code					
DT : Ditch					
Inspector Comment					
A ditch is at the levee toe.					

Photo 1 of 1 : FA_2019_ST0012_295_4_20190829_00001.jpg



View of the ditch on the landward side of the levee looking downstream.
Fall 2015.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	10/16/2019 10/16/2019	Zach Jojola

LM Start	4.30	Rating **	M	Issue No.	33	
LM End	4.30	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.598840 °	38.598840 °	
				-121.739600 °	-121.739600 °	
DWR ID	17684					
Comment Code						
Inspector Comment						
DS_ID:17684						
FS_ID:29303						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Not Found						
UCIP Comments: 09/19/2012 PG&E may provide further info. (DWR UCIP - P. Amatya)						
FIELD_STRUCT_DESC: 8-inch gas line of unknown material through both levees. (Pacific Gas and Electric Co. [PG&E]). [Additional Reference(s): USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 46+50)]						
FS Date: 5/28/2013 2:36:00 PM						

No Photos

LM Start	5.07	Rating **	M	Issue No.	34
LM End	5.07	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP Field Study			38.599940 °	38.599940 °
				-121.753530 °	-121.753530 °
DWR ID	17667				
Comment Code					
Inspector Comment					
DS_ID:17667 FS_ID:44951 EP_NO: 15811 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 05/28/2013 No markers or other indication of pipe location. Needs to be marked. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: Replace existing 4-inch diameter natural gas pipeline with an 8-inch diameter natural gas pipeline under the channel and within both banks of Willow Slough. (Permit No. 15811, unknown year constructed - Shell Western E&P Inc.) FS Date: 5/5/2015 8:40:19 AM					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2019 Levee Inspection Results

Sacramento Maintenance Yard Willow Slough Bypass

Waterway			Bank	Unit Miles
Unit No. 02 Willow Slough Bypass or South Levee			Right	7.46
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	4/30/2019 - 4/30/2019		10/16/2019 - 10/16/2019	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By				

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.07	Rating **	M	Issue No.	34	
LM End	0.07	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.599100 °	38.599100 °	
				-121.753260 °	-121.753260 °	
DWR ID	17703					
Comment Code						
Inspector Comment						
DS_ID:17703 FS_ID:45283 EP_NO: 15811 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 05/10/2017 Unable to find permit file to clarify if crossing was constructed. (DWR UCIP - O. Magana) 05/24/2013 Need to contact owner of pipe to place indicators on levee. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: Replace existing 4-inch diameter natural gas pipeline with an 8-inch diameter natural gas pipeline under the channel and within both banks of Willow Slough. (Permit No. 15811, unknown year - Shell Western E&P Inc.) FS Date: 5/14/2015 1:35:47 PM						

No Photos

LM Start	0.29	Rating **	M	Issue No.	7
LM End	0.40	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.598993 °	38.599045 °
				-121.749130 °	-121.747107 °
DWR ID	DWR_ST0012_02_f_2019_7				
Comment Code					
DT : Ditch					
Inspector Comment					
The ditch is located at the levee toe.					

Photo 1 of 2 : FA_2019_ST0012_296_7_20190829_00002.jpg



A view of the ditch near LM 0.29. Fall 2016.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.29	Rating **	M	Issue No.	7 (cont)	
LM End	0.40	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			38.598993 °		38.599045 °
				-121.749130 °		-121.747107 °
DWR ID	DWR_ST0012_02_f_2019_7					
Comment Code						
DT : Ditch						
Inspector Comment						
The ditch is located at the levee toe.						

Photo 2 of 2 : FA_2019_ST0012_296_7_20190829_00003.jpg



View of the ditch on the landward side of the levee looking downstream. Spring 2016.

LM Start	0.83	Rating **	A/W	Issue No.	35	
LM End	0.83	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.597813 °	38.597813 °	
				-121.739636 °	-121.739636 °	
DWR ID	534					
Comment Code						
Inspector Comment						
DS_ID:534 FS_ID:45286 EP_NO: 10327 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/24/2013 Flap gate repaired. (DWR Sacramento Yard - C. Lund) 09/20/2012 Flap gate is not properly closing. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated drainage pipe through the levee, 17.5 feet below the crown. Flap gate is located on the waterside (WS) slope. (24-inch pipe [HLM 0.78] authorized under Automatic Board Order (ABO) issued as Permit No. 10327 - Heidrick). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 47+00)] FS Date: 5/14/2015 1:36:52 PM						

Photo 1 of 3 : UCIP_FA_2019_45286_22464.jpg



Waterside view- concrete headwall and CM pipe

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	0.83	Rating **	A/W	Issue No.	35 (cont)
LM End	0.83	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.597813 °	38.597813 °
				-121.739636 °	-121.739636 °
DWR ID	534				
Comment Code					
Inspector Comment					
DS_ID:534 FS_ID:45286 EP_NO: 10327 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/24/2013 Flap gate repaired. (DWR Sacramento Yard - C. Lund) 09/20/2012 Flap gate is not properly closing. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated drainage pipe through the levee, 17.5 feet below the crown. Flap gate is located on the waterside (WS) slope. (24-inch pipe [HLM 0.78] authorized under Automatic Board Order (ABO) issued as Permit No. 10327 - Heidrick). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 47+00)] FS Date: 5/14/2015 1:36:52 PM					

LM Start	0.83	Rating **	A/W	Issue No.	35 (cont)
LM End	0.83	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2019_45286_22460.jpg



Waterside view- overview

Photo 3 of 3 : UCIP_FA_2019_45286_22461.jpg



Waterside view- CM pipe and flap gate.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Sacramento Maintenance Yard Willow Slough Bypass

No Photos

Waterside view- flap gate and CM pipe

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	1.21	Rating **	A/W	Issue No.	36 (cont)	
LM End	1.21	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.593390 °	38.593390 °	
				-121.735600 °	-121.735600 °	
DWR ID	536					
Comment Code						
Inspector Comment						
DS_ID:536 FS_ID:13725 EP_NO: 10331 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/20/2012 Landside- upper corner of headwall was chipped off. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 1.15] authorized under Automatic Board Order (ABO) issued as Permit No. 10331, 1974 - Lavezzo). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 66+98)] FS Date: 5/24/2013 8:22:08 AM						

Photo 2 of 3 : UCIP_FA_2019_13725_22469.jpg



Landside view- concrete headwall and pipe

LM Start	1.21	Rating **	A/W	Issue No.	36 (cont)
LM End	1.21	Issue Type +	Ma	Location *	

Photo 3 of 3 : UCIP_FA_2019_13725_22468.jpg



Landside view- concrete headwall corner chipped off

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	1.40	Rating **	M	Issue No.	24
LM End	1.40	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.591101°	38.591101°
				-121.733454°	-121.733454°
DWR ID	DWR_ST0012_02_f_2019_24				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion on the waterside slope and toe road. Recommend monitoring.					

Photo 1 of 1 : FA_2019_ST0012_296_24_20191108_00049.jpg



View of erosion on waterside slope and toe road. Fall 2019.

LM Start	1.43	Rating **	A/W	Issue No.	25
LM End	1.43	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.590883 °	38.590883 °
				-121.733182 °	-121.733182 °
DWR ID	DWR_ST0012_02_f_2019_25				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion on the waterside toe road. Recommend monitoring.					

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	1.60	Rating **	M	Issue No.	37	
LM End	1.60	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.589970 °	38.589970 °	
				-121.730340 °	-121.730340 °	
DWR ID	537					
Comment Code						
Inspector Comment						
DS_ID:537						
FS_ID:45310						
EP_NO: 10324						
Repair Type: Non-Urgent						
Crossing Status: Not Found						
UCIP Comments: 05/24/2013 This pipe is not there. May have been abandoned. (DWR Sacramento Yard - C. Lund)						
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.5 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 1.54] authorized under Automatic Board Order (ABO) issued as Permit No. 10324 , 1974 - City of Davis). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 86+00)]						
FS Date: 5/14/2015 1:46:48 PM						

No Photos

LM Start	2.44	Rating **	A/W	Issue No.	28
LM End	2.44	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589744 °	38.589744 °
				-121.714807 °	-121.714807 °
DWR ID	DWR_ST0012_02_s_ 2019_28				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Runoff on the waterside toe road is causing erosion. Recommend monitoring.					

Photo 1 of 1 : FA_2019_ST0012_296_28_20190829_00006.jpg



View of erosion on the waterside toe road. Spring 2019.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Sacramento Maintenance Yard Willow Slough Bypass

View of erosion on toe road. Fall 2019.

No Photos

View of erosion on the waterside toe road. Fall 2018.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	2.82	Rating **	A/W	Issue No.	10 (cont)	
LM End	2.82	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.589691 °		38.589691 °
				-121.707740 °		-121.707740 °
DWR ID	DWR_ST0012_02_f_2014_10					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
There is erosion on the waterside toe road. Recommend monitoring.						

Photo 2 of 2 : FA_2019_ST0012_296_10_20190829_00005.jpg



View of the erosion on the toe road looking downstream. Spring 2016.

LM Start	2.92	Rating **	A/W	Issue No.	30
LM End	2.92	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589672 °	38.589672 °
				-121.705929 °	-121.705929 °
DWR ID	DWR_ST0012_02_s_2019_30				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
There is erosion on the waterside toe road. Recommend monitoring.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	2.97	Rating **	A/W	Issue No.	38
LM End	2.97	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589680 °	38.589680 °
				-121.705040 °	-121.705040 °
DWR ID	538				
Comment Code					
Inspector Comment					
DS_ID:538 FS_ID:45291 EP_NO: 10328 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 2.90] authorized under Automatic Board Order (ABO) issued as Permit No. 10328, 1974 - Heidrick). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 158+69)] FS Date: 5/14/2015 1:40:56 PM					

LM Start	2.97	Rating **	A/W	Issue No.	38 (cont)
LM End	2.97	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_45291_22479.jpg



Landside view- concrete headwall and pipe (temporarily closed used wooden planks).

Photo 2 of 3 : UCIP_FA_2019_45291_22478.jpg



Landside view- concrete headwall

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	2.97	Rating **	A/W	Issue No.	38 (cont)
LM End	2.97	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589680 °	38.589680 °
				-121.705040 °	-121.705040 °
DWR ID	538				
Comment Code					
Inspector Comment					
DS_ID:538 FS_ID:45291 EP_NO: 10328 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 2.90] authorized under Automatic Board Order (ABO) issued as Permit No. 10328, 1974 - Heidrick). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 158+69)] FS Date: 5/14/2015 1:40:56 PM					

Photo 3 of 3 : UCIP_FA_2019_45291_22477.jpg



Landside view- open ditch.

LM Start	3.32	Rating **	A/W	Issue No.	21
LM End	3.32	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589634 °	38.589634 °
				-121.698570 °	-121.698570 °
DWR ID	DWR_ST0012_02_f_2019_21				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion on the waterside toe road. Recommend monitoring.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.56	Rating **	A/W	Issue No.	22
LM End	3.56	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589596 °	38.589596 °
				-121.693967 °	-121.693967 °
DWR ID	DWR_ST0012_02_f_2019_22				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion on the waterside toe road. Recommend monitoring.					

No Photos

LM Start	3.59	Rating **	M	Issue No.	39	
LM End	3.59	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.589570 °	38.589570 °	
				-121.693590 °	-121.693590 °	
DWR ID	540					
Comment Code						
Inspector Comment						
DS_ID:540 FS_ID:45311 EP_NO: 7109 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 09/20/2012 No makers found. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: Buried telephone cable through the levee and under channel. Cable through the levee is 2 feet below crown. (telephone cable authorized under Permit No. 7109, 1970 - Pacific Telephone and Telegraph Company [PT&T]) [Additional Reference(s): DWR Levee Log, 1990] FS Date: 5/14/2015 1:47:19 PM						

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.60	Rating **	A/W	Issue No.	6
LM End	3.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.589552 °	38.589552 °
				-121.693408 °	-121.693408 °
DWR ID	DWR_ST0012_02_f_2017_6				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
There is a burrow hole on the landside slope near access ramp.					

No Photos

LM Start	3.61	Rating **	A/W	Issue No.	40
LM End	3.61	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589570°	38.589570°
				-121.693090°	-121.693090°
DWR ID	541				
Comment Code					
Inspector Comment					
DS_ID:541 FS_ID:45294 EP_NO: 10335 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 09/20/2012 Landside view photos are missing. Daylight pipe is a steel pipe. The pipe through the levee may be a CMP. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 1 of 2. 42-inch corrugated metal drainage pipe through the levee, 12 feet below the crown. Flap gate located on the waterside (WS) end. 42-inch pipe sleeved through a 48-inch corrugated metal pipe (CMP). (two 48-inch pipes [HLM 3.54] authorized under Automatic Board Order (ABO) issued as Permit No. 10335, 1974 - Snyder). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, (Station 192+80)] FS Date: 5/14/2015 1:41:55 PM					

Photo 1 of 3 : UCIP_FA_2019_45294_22789.jpg



Waterside overview- middle 42-inch pipe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.61	Rating **	A/W	Issue No.	40 (cont)	
LM End	3.61	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.589570 °	38.589570 °	
				-121.693090 °	-121.693090 °	
DWR ID	541					
Comment Code						
Inspector Comment						
DS_ID:541 FS_ID:45294 EP_NO: 10335 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 09/20/2012 Landside view photos are missing. Daylight pipe is a steel pipe. The pipe through the levee may be a CMP. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 1 of 2. 42-inch corrugated metal drainage pipe through the levee, 12 feet below the crown. Flap gate located on the waterside (WS) end. 42-inch pipe sleeved through a 48-inch corrugated metal pipe (CMP). (two 48-inch pipes [HLM 3.54] authorized under Automatic Board Order (ABO) issued as Permit No. 10335, 1974 - Snyder). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, (Station 192+80)] FS Date: 5/14/2015 1:41:55 PM						

LM Start	3.61	Rating **	A/W	Issue No.	40 (cont)
LM End	3.61	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2019_45294_22788.jpg



Waterside overview-

Photo 3 of 3 : UCIP_FA_2019_45294_22792.jpg



Waterside view- 42-inch steel pipe and flap gate.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.61	Rating **	A/W	Issue No.	41
LM End	3.61	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589567°	38.589567°
				-121.693070°	-121.693070°
DWR ID	17729				
Comment Code					
Inspector Comment					
DS_ID:17729 FS_ID:45295 EP_NO: 10335 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 05/05/2017 48-inch pipe authorized under ABO/Permit No. 10335. Reference has been verified and this crossing is referenced correctly. No records were found to support the additional of the 42-inch through the 48-inch pipe. (DWR UCIP - O. Magana) 09/20/2012 Daylight pipe looks like steel pipe. The pipe through the levee may be a CMP. Needs a landside view photos which is missing. This pipe may be a 42-inch pipe mentioned in ABO 10333. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 2 of 2. 42-inch corrugated metal drainage pipe through the levee, 12 feet below the crown. Flap gate located on the waterside (WS) end. 42-inch pipe sleeved through a 48-inch corrugated metal pipe (CMP). (two 48-inch pipes [HLM 3.54] authorized under Automatic Board Order (ABO) issued as Permit No. 10335, 1974 - Snyder). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, (Station 192+88)] FS Date: 5/14/2015 1:42:08 PM					

LM Start	3.61	Rating **	A/W	Issue No.	41 (cont)
LM End	3.61	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_45295_22794.jpg



Waterside overview- far right 42-inch pipe.

Photo 2 of 3 : UCIP_FA_2019_45295_22793.jpg



Waterside view- 42-inch steel pipe and flap gate (right).

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	3.61	Rating **	A/W	Issue No.	41 (cont)	
LM End	3.61	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DRAFT DWR UCIP LMA Responsibility			38.589567 °		38.589567 °
				-121.693070 °		-121.693070 °
DWR ID	17729					
Comment Code						
Inspector Comment						
DS_ID:17729 FS_ID:45295 EP_NO: 10335 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 05/05/2017 48-inch pipe authorized under ABO/Permit No. 10335. Reference has been verified and this crossing is referenced correctly. No records were found to support the additional of the 42-inch through the 48-inch pipe. (DWR UCIP - O. Magana) 09/20/2012 Daylight pipe looks like steel pipe. The pipe through the levee may be a CMP. Needs a landside view photos which is missing. This pipe may be a 42-inch pipe mentioned in ABO 10333. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 2 of 2. 42-inch corrugated metal drainage pipe through the levee, 12 feet below the crown. Flap gate located on the waterside (WS) end. 42-inch pipe sleeved through a 48-inch corrugated metal pipe (CMP). (two 48-inch pipes [HLM 3.54] authorized under Automatic Board Order (ABO) issued as Permit No. 10335, 1974 - Snyder). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, (Station 192+88)] FS Date: 5/14/2015 1:42:08 PM						

Photo 3 of 3 : UCIP_FA_2019_45295_22796.jpg



Waterside overview- outlet structure.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	4.29	Rating **	A/W	Issue No.	42	
LM End	4.29	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.589530 °	38.589530 °	
				-121.680560 °	-121.680560 °	
DWR ID	545					
Comment Code						
Inspector Comment						
DS_ID:545 FS_ID:45298 EP_NO: 10334 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - good/clear, LS - good/clear needs to be cut and sprayed, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/24/2013 Rodent activities on headwall is far from the levee. Inlet is across city of davis drainage ditch. Inlet was cleaned last fall. see picture. (DWR Sacramento Yard - C. Lund) 09/20/2012 May need video inspection as seen rodent activities on headwall. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 4.21] authorized under Automatic Board Order (ABO) issued as Permit No. 10334 - Rhinehart) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 228+46)] FS Date: 5/14/2015 1:43:00 PM						

LM Start	4.29	Rating **	A/W	Issue No.	42 (cont)
LM End	4.29	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_45298_22805.jpg



Waterside overview- pipe and flap gate with dense vegetation.

Photo 2 of 3 : UCIP_FA_2019_45298_22804.jpg



Landside overview

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	4.29	Rating **	A/W	Issue No.	42 (cont)
LM End	4.29	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589530 °	38.589530 °
				-121.680560 °	-121.680560 °
DWR ID	545				
Comment Code					
Inspector Comment					
DS_ID:545 FS_ID:45298 EP_NO: 10334 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - good/clear, LS - good/clear needs to be cut and sprayed, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/24/2013 Rodent activities on headwall is far from the levee. Inlet is across city of davis drainage ditch. Inlet was cleaned last fall. see picture. (DWR Sacramento Yard - C. Lund) 09/20/2012 May need video inspection as seen rodent activities on headwall. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 4.21] authorized under Automatic Board Order (ABO) issued as Permit No. 10334 - Rhinehart) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 2 (Station 228+46)] FS Date: 5/14/2015 1:43:00 PM					

Photo 3 of 3 : UCIP_FA_2019_45298_22808.jpg



Enter photo 5 description or comment here.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	4.59	Rating **	M	Issue No.	43
LM End	4.59	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589575 °	38.589575 °
				-121.674950 °	-121.674950 °
DWR ID	546				
Comment Code					
Inspector Comment					
DS_ID:546 FS_ID:45285 EP_NO: 10319 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/24/2013 Material removed from inlet last fall. Outlet cleared. (DWR Sacramento Yard - C. Lund) 09/20/2012 Soil and debris on inlet mouth. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Flap gate is located on the waterside (WS) end. (18-inch pipe [HLM 4.52] authorized under Automatic Board Order (ABO) issued as Permit No. 10319, 1974 - Bell) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 244+47)] FS Date: 5/14/2015 1:36:11 PM					

LM Start	4.59	Rating **	M	Issue No.	43 (cont)
LM End	4.59	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_45285_22809.jpg



Waterside view- pipe and flap gate.

Photo 2 of 3 : UCIP_FA_2019_45285_22811.jpg



Landside view- pipe and headwall.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	4.59	Rating **	M	Issue No.	43 (cont)	
LM End	4.59	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.589575 °	38.589575 °	
				-121.674950 °	-121.674950 °	
DWR ID	546					
Comment Code						
Inspector Comment						
DS_ID:546 FS_ID:45285 EP_NO: 10319 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/24/2013 Material removed from inlet last fall. Outlet cleared. (DWR Sacramento Yard - C. Lund) 09/20/2012 Soil and debris on inlet mouth. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Flap gate is located on the waterside (WS) end. (18-inch pipe [HLM 4.52] authorized under Automatic Board Order (ABO) issued as Permit No. 10319, 1974 - Bell) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 244+47)] FS Date: 5/14/2015 1:36:11 PM						

Photo 3 of 3 : UCIP_FA_2019_45285_22810.jpg



Landside view- soil and debris on mouth of the inlet pipe.

LM Start	5.01	Rating **	A/W	Issue No.	33
LM End	5.01	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589573 °	38.589573 °
				-121.667315 °	-121.667315 °
DWR ID	DWR_ST0012_02_f_2019_33				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
There is erosion on the waterside toe road. Recommend monitoring.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.05	Rating **	A/W	Issue No.	44
LM End	5.05	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589560 °	38.589560 °
				-121.666540 °	-121.666540 °
DWR ID	548				
Comment Code					
Inspector Comment					
DS_ID:548 FS_ID:45301 EP_NO: 10321 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: 24-inch drainage pipe through the levee, 17 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 4.97] authorized under Automatic Board Order (ABO) issued as Permit No. 10321, 1974 - Campbell) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 268+57)] FS Date: 5/14/2015 1:44:17 PM					

Photo 1 of 3 : UCIP_FA_2019_45301_22845.jpg



Landside view- overview

LM Start	5.05	Rating **	A/W	Issue No.	44 (cont)
LM End	5.05	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2019_45301_22844.jpg



Waterside view- overview

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.05	Rating **	A/W	Issue No.	44 (cont)	
LM End	5.05	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.589560 °	38.589560 °	
				-121.666540 °	-121.666540 °	
DWR ID	548					
Comment Code						
Inspector Comment						
DS_ID:548 FS_ID:45301 EP_NO: 10321 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: 24-inch drainage pipe through the levee, 17 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 4.97] authorized under Automatic Board Order (ABO) issued as Permit No. 10321, 1974 - Campbell) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 268+57)] FS Date: 5/14/2015 1:44:17 PM						

Photo 3 of 3 : UCIP_FA_2019_45301_22846.jpg



Waterside view- pipe and flap gate. Water was running in the pipe during the survey.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.40	Rating **	A/W	Issue No.	45
LM End	5.40	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589540 °	38.589540 °
				-121.660070 °	-121.660070 °
DWR ID	549				
Comment Code					
Inspector Comment					
DS_ID:549 FS_ID:45302 EP_NO: 10322 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 17.5 feet below the crown. Flap gate is located on the waterside (WS) end. Concrete headwall with wing walls is located on WS. (24-inch pipe [HLM 5.32] authorized under Automatic Board Order (ABO) issued as Permit No. 10322, 1974 - Chew). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 287+19)] FS Date: 5/14/2015 1:44:30 PM					

LM Start	5.40	Rating **	A/W	Issue No.	45 (cont)
LM End	5.40	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_45302_22849.jpg



Landside view-overview

Photo 2 of 3 : UCIP_FA_2019_45302_22848.jpg



Waterside view-pipe and flap gate

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.40	Rating **	A/W	Issue No.	45 (cont)	
LM End	5.40	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.589540 °	38.589540 °	
				-121.660070 °	-121.660070 °	
DWR ID	549					
Comment Code						
Inspector Comment						
DS_ID:549 FS_ID:45302 EP_NO: 10322 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 17.5 feet below the crown. Flap gate is located on the waterside (WS) end. Concrete headwall with wing walls is located on WS. (24-inch pipe [HLM 5.32] authorized under Automatic Board Order (ABO) issued as Permit No. 10322, 1974 - Chew). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 287+19)] FS Date: 5/14/2015 1:44:30 PM						

Photo 3 of 3 : UCIP_FA_2019_45302_22847.jpg



Waterside view- overview

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.53	Rating **	M	Issue No.	46	
LM End	5.53	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.589530 °	38.589530 °	
				-121.657750 °	-121.657750 °	
DWR ID	17696					
Comment Code						
Inspector Comment						
DS_ID:17696 FS_ID:54251 EP_NO: 16700 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 07/23/2019 CVFPB approved Compliance Plan and Schedule of pipe rehabilitation due to a sinkhole discovered at WS berm of levee near pipe alignment. (O.Yakimov - DWR UCIP)09/20/2012 No pump station found in landside of the levee. A slide gate was found on landside of the levee. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 48-inch reinforced concrete drainage pipe through the levee, 19 feet below the crown. Pipe goes through both levees and under the Willow Slough Bypass. Inlet structure, slide gate and trash rack, is located on the landside (LS). (48-inch pipe authorized under Permit No. 16700, 1998 - City of Davis) FS Date: 7/23/2019 10:14:01 AM						

LM Start	5.53	Rating **	M	Issue No.	46 (cont)
LM End	5.53	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2019_54251_22858.jpg



Landside view- inlet structure.

Photo 2 of 3 : UCIP_FA_2019_54251_22857.jpg



Landside view- trash rack and slide gate in inlet structure.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.53	Rating **	M	Issue No.	46 (cont)	
LM End	5.53	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP Field Study			38.589530 °	38.589530 °	
				-121.657750 °	-121.657750 °	
DWR ID	17696					
Comment Code						
Inspector Comment						
DS_ID:17696 FS_ID:54251 EP_NO: 16700 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 07/23/2019 CVFPB approved Compliance Plan and Schedule of pipe rehabilitation due to a sinkhole discovered at WS berm of levee near pipe alignment. (O.Yakimov - DWR UCIP)09/20/2012 No pump station found in landside of the levee. A slide gate was found on landside of the levee. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 48-inch reinforced concrete drainage pipe through the levee, 19 feet below the crown. Pipe goes through both levees and under the Willow Slough Bypass. Inlet structure, slide gate and trash rack, is located on the landside (LS). (48-inch pipe authorized under Permit No. 16700, 1998 - City of Davis) FS Date: 7/23/2019 10:14:01 AM						

Photo 3 of 3 : UCIP_FA_2019_54251_22856.jpg



Landside view- Headwall with wing walls.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.57	Rating **	A/W	Issue No.	47
LM End	5.57	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589520 °	38.589520 °
				-121.656860 °	-121.656860 °
DWR ID	551				
Comment Code					
Inspector Comment					
DS_ID:551 FS_ID:45305 EP_NO: 10325 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/20/2012 Slide gate on landside of the levee over the field. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 18 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 5.50] authorized under Automatic Board Order (ABO) issued as Permit No. 10325, 1974 - Ferris). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 296+34)] FS Date: 5/14/2015 1:45:21 PM					

LM Start	5.57	Rating **	A/W	Issue No.	47 (cont)
LM End	5.57	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_45305_22861.jpg



Landside view- inlet structure.

Photo 2 of 3 : UCIP_FA_2019_45305_22860.jpg



Landside view- concrete headwall and slide gate.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.57	Rating **	A/W	Issue No.	47 (cont)
LM End	5.57	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589520 °	38.589520 °
				-121.656860 °	-121.656860 °
DWR ID	551				
Comment Code					
Inspector Comment					
DS_ID:551 FS_ID:45305 EP_NO: 10325 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/20/2012 Slide gate on landside of the levee over the field. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 18 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 5.50] authorized under Automatic Board Order (ABO) issued as Permit No. 10325, 1974 - Ferris). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 296+34)] FS Date: 5/14/2015 1:45:21 PM					

Photo 3 of 3 : UCIP_FA_2019_45305_22859.jpg



Waterside view- overview.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.59	Rating **	A/W	Issue No.	48
LM End	5.59	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589520 °	38.589520 °
				-121.656550 °	-121.656550 °
DWR ID	552				
Comment Code					
Inspector Comment					
DS_ID:552 FS_ID:45306 EP_NO: 10338 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/20/2012 Open inlet over the field. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. Flap gate is located on the waterside (WS) end. (36-inch pipe [HLM 5.51] authorized under Automatic Board Order (ABO) issued as Permit No. 10325, 1974 - Ferris) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 297+26)] FS Date: 5/14/2015 1:45:32 PM					

LM Start	5.59	Rating **	A/W	Issue No.	48 (cont)
LM End	5.59	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_45306_22873.jpg



Waterside view- overview.

Photo 2 of 3 : UCIP_FA_2019_45306_22872.jpg



Waterside view- pipe and flap gate.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	5.59	Rating **	A/W	Issue No.	48 (cont)	
LM End	5.59	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.589520 °	38.589520 °	
				-121.656550 °	-121.656550 °	
DWR ID	552					
Comment Code						
Inspector Comment						
DS_ID:552 FS_ID:45306 EP_NO: 10338 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/20/2012 Open inlet over the field. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. Flap gate is located on the waterside (WS) end. (36-inch pipe [HLM 5.51] authorized under Automatic Board Order (ABO) issued as Permit No. 10325, 1974 - Ferris) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 297+26)] FS Date: 5/14/2015 1:45:32 PM						

Photo 3 of 3 : UCIP_FA_2019_45306_22876.jpg



Waterside view- pipe and flap gate.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	6.07	Rating **	A/W	Issue No.	49
LM End	6.07	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DRAFT DWR UCIP LMA Responsibility			38.589040°	38.589040°
				-121.647870°	-121.647870°
DWR ID	553				
Comment Code					
Inspector Comment					
DS_ID:553 FS_ID:45307 EP_NO: 10325 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/20/2012 Outlet structure under water in waterside of the levee. No access to the inlet structure. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 18 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 5.98] authorized under Automatic Board Order (ABO) issued as Permit No. 10325, 1974 - Ferris) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 328+51)] FS Date: 5/14/2015 1:45:44 PM					

LM Start	6.07	Rating **	A/W	Issue No.	49 (cont)
LM End	6.07	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2019_45307_22869.jpg



Waterside view- overview

Photo 2 of 3 : UCIP_FA_2019_45307_22868.jpg



Waterside view- outlet structure under the water.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	6.07	Rating **	A/W	Issue No.	49 (cont)	
LM End	6.07	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.589040 °	38.589040 °	
				-121.647870 °	-121.647870 °	
DWR ID	553					
Comment Code						
Inspector Comment						
DS_ID:553 FS_ID:45307 EP_NO: 10325 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 09/20/2012 Outlet structure under water in waterside of the levee. No access to the inlet structure. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 18 feet below the crown. Flap gate is located on the waterside (WS) end. (24-inch pipe [HLM 5.98] authorized under Automatic Board Order (ABO) issued as Permit No. 10325, 1974 - Ferris) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 328+51)] FS Date: 5/14/2015 1:45:44 PM						

Photo 3 of 3 : UCIP_FA_2019_45307_22870.jpg



Landside view- overview

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2019

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	10/16/2019 10/16/2019	Zach Jojola

LM Start	7.01	Rating **	A/W	Issue No.	50	
LM End	7.01	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DRAFT DWR UCIP LMA Responsibility			38.575750 °	38.575750 °	
				-121.646420 °	-121.646420 °	
DWR ID	555					
Comment Code						
Inspector Comment						
DS_ID:555 FS_ID:45309 EP_NO: 10338 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - submerged in water, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: 42-inch corrugated metal drainage pipe through the levee, 23.5 feet below the crown. Flap gate is located on the waterside (WS) end. Concrete headwall with wing walls is located on the landside (LS). (42-inch pipe [HLM 6.92] authorized under Automatic Board Order (ABO) issued as Permit No. 10338, 1974 - Woodland Farms, Ltd) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 5 (Station 374+00)] FS Date: 5/14/2015 1:46:34 PM						

Photo 1 of 2 : UCIP_FA_2019_45309_22878.jpg



Landside view- Wing wall and pipe

LM Start	7.01	Rating **	A/W	Issue No.	50 (cont)
LM End	7.01	Issue Type +	Ma	Location *	

Photo 2 of 2 : UCIP_FA_2019_45309_22877.jpg



Waterside view- pipe and flap gate

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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